Buddleja coriacea

Jøker, Dorthe; Cruz, Nelson T.; Morales, Manuel U.; Rojas, Edilberto

Published in:
Seed Leaflet

Publication date:
2002

Document version
Publisher's PDF, also known as Version of record

SEED LEAFLET

No. 54 January 2002

Buddleja coriacea Remy.

Taxonomy and nomenclature

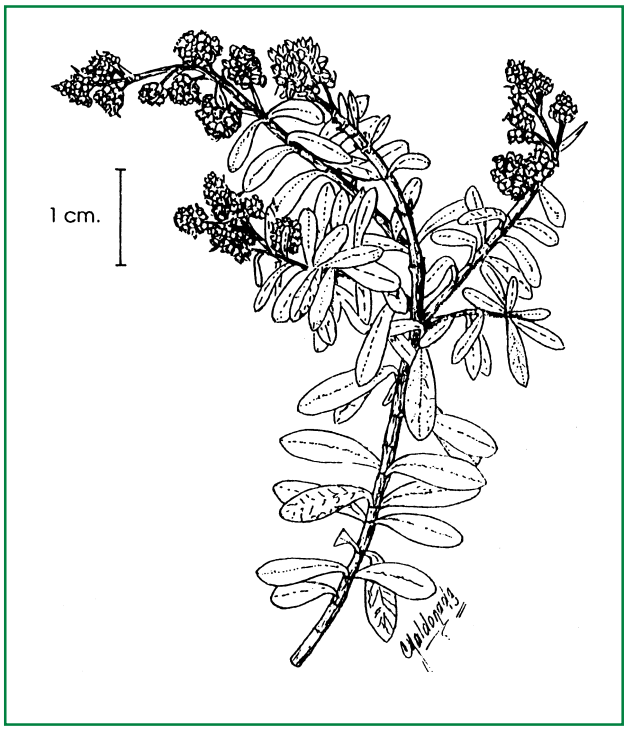
Family: Loganiaceae
Synonyms: *Buddleja oblongifolia* Rusby
Vernacular/common names: Kiswara (Bolivia); c'olle negro (Peru).

Distribution and habitat

In the area of natural distribution it is found at altitudes up to 4400 masl., on medium deep, rocky, dry to semi-humid soils. Best growth is achieved in areas with annual precipitation about 600 mm. It tolerates strong constant winds and temperatures below 0°C but is susceptible to drought and fire.

Uses

The dense foliage makes it suitable for windbreaks and frost protection and it is often planted around fields. The young shoots are used for fodder and the wood is used for firewood, construction and in some areas for medicine.



Flowering branch. (Torrico *et al.*, 1994)

Botanical description

Small evergreen tree or shrub, in some areas up to 12 m tall and diameter of 40 cm. The crown is wide. The trunk has fissured bark and branches almost from the ground.

Leaves 3-5 cm long, simple, opposite and leathery and with whitish hairs on the lower side. Flowers in racemes, bisexual, about 7 mm wide, yellow at first, later turning orange.

Fruit and seed description

Fruit: ovoid capsule, whitish to yellow. Each fruit contains about 90 seeds.
Seed: straw-coloured or grey and very small. There are about 10 million seeds per kg. Due to the small size it is difficult to separate the seed from impurities.

Flowering and fruiting habit

In most places within the area of natural distribution fruiting begins in May, and depending on locality it continues until July-October.

Harvest

The seeds are harvested when the fruits begin to open. Due to their small size, the seed must be kept in buckets or plastic bags, otherwise too many seeds will be lost.

Processing and handling

After harvest the seeds are dried in the sun for 10-15 days in a place that is protected from the wind. The first cleaning is performed using a 2 mm mesh. This will yield about 30 g of fairly pure seed per kg fruits.

After the first cleaning, the fruits must be crushed manually to open the remaining fruits before the second cleaning with a 1 mm mesh. The purity of the seed from this cleaning will be lower than from the first.

Storage and viability

According to experience from Peru, seeds that are stored in paper bags at ambient temperature can retain viability for up to three years.

Dormancy and pretreatment

The seed has no dormancy and pretreatment is not required.

Sowing and germination

The small seeds are best sown with a sieve in order to obtain a uniform distribution in the seedbed. The seeds are pressed gently into the substrate and covered with a fine layer of sand. Germination normally starts after 10 days and terminates after 20 days. The seedlings of this species are very fragile and special care must be taken to protect the seedlings from desiccation and direct sunlight. Because of their fragile nature the seedlings should stay in the seedbed for at least 10 weeks.

After pricking out, the seedlings remain in the nursery for another 14-18 months until they are 30-40 cm tall and ready for planting in the field. Vegetative propagation by cuttings is also possible and plantlets produced this way are less fragile.

Selected readings

Chilote, J.P. *et al*. 1985. *Apuntes sobre algunas especies forestales nativas de la sierra peruviana*. Proyecto FAO/ Holanda/INFOR. Lima.

Cruz, N.T., M. Morales and E. Rojas. 2000. *Buddleja coriacea*. Fichas Tecnicas de Especies Forestales. BASFOR, Bolivia.

Torrico, G., C. Peca, S. Beck and E. García. 1994. *Leñosas útiles de Potosí.* Proyecto FAO/HOLANDA/CDF. Desarrollo Forestal comunal en el Altiplano Boliviano. Potosí.

THIS NOTE WAS PREPARED BY DANIDA FOREST SEED CENTRE AND BANCO DE SEMILLAS FORESTALES - BOLIVIA

Authors: Dorthe Jøker, Nelson T. Cruz, Manuel U. Morales and Edilberto Rojas.

Danida Forest Seed Centre
Krogerupvej 21
DK-3050 Humlebaek
Denmark

Phone: +45-49190500
Fax: +45-49160258
Email: dfsc@sns.dk
Website: www.dfsc.dk